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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/759,179	01/20/2004	Chihiro Uematsu	1021.43414X00	7828
20457 7590 05/24/2007 ANTONELLI, TERRY, STOUT & KRAUS, LLP 1300 NORTH SEVENTEENTH STREET SUITE 1800 ARLINGTON, VA 22209-3873			EXAMINER MUMMERT, STEPHANIE KANE	
			ART UNIT 1637	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

**Advisory Action
Before the Filing of an Appeal Brief**

Application No.

10/759,179

Applicant(s)

UEMATSU ET AL.

Examiner

Stephanie K. Mummert, Ph.D.

Art Unit

1637

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 24 April 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: _____.
Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____.
13. ☐ Other: _____.

JEFFREY FREDMAN
PRIMARY EXAMINER

Continuation of 11. does NOT place the application in condition for allowance because:

The request for reconsideration has been considered but does NOT place the application in condition for allowance because Applicant's arguments regarding the Wenz reference are not persuasive..

Applicant traverses the rejection of claims 1-9 and 14 under 35 U.S.C. 103 as being unpatentable over Wenz in view of Olyn, Livak and Eun. Applicant asserts "these references applied by the Examiner would have neither taught nor would have suggested such a method for expressed gene analysis as in the present claims". Applicant goes on to summarize the invention and points out the advantages of the "universal primer/probe". Saying specifically, that "through such introduction and use of the recited nonspecific first base sequence and the probe comprising inter alia, a base sequence identical or complementary to the first base sequence, an advantage is achieved that the probe used in the present invention does not have to be designed for each use in accordance with the base sequence of the target gene and can be universally used regardless of the target gene" (p. 1-3 of remarks).

Applicant's arguments have been considered but are not persuasive. Particularly, where Applicant notes "the 'AS-SP' portion cannot hybridize with a target and the probe cannot extend from the 'AS-SP' portion, because the 'T-SP' portion is located at the 5' end of the probe and the 'P-SP' portion is located at the 3' end of the probe" and concludes that "the probe disclosed in Wenz.. is functionally different from the primer having the first through third sequences, of the present invention". (p. 3 of remarks). Further, Applicant notes "Wenz et al. uses a probe including a T-SP portion (a target specific portion), a P-SP portion (a target non-specific sequence), and an AS-SP portion between the T-SP portion and the P-SP portion. It is respectfully submitted that the AS-SP portion cannot hybridize with the target, and the probe cannot extend from the AS-SP portion because the T-SP portion is located at the 5' end of the probe and the P-SP portion is located at the 3' end of the probe. It is respectfully submitted that Figure 1 of Wenz clearly shows this fact, that is, the probe of Wenz cannot be used as a primer" and "that the three portions described in Wenz et al. are functionally different from the first, second and third base sequences of the present invention...in function as well as construction" (p. 5-6). Finally, regarding Wenz, Applicant asserts "the addressable-specific portion of the probe in Wenz, et al. does not serve the same functional role as the first base sequence in the present claims; and in particular, as set forth previously, it is respectfully submitted that the addressable specific portion of the primer in Wenz et al. cannot hybridize with a target and the probe cannot extend from the AS-SP portion."

It is noted, in response, that Applicant is reading the Wenz reference more narrowly than the teachings of the Wenz disclosure would indicate. While Applicant is correct that the probe format depicted in Figure 1, comprises a probe that incorporates the AS-SP portion at the 3' end and the T-SP at the 5' end. However, the specification of Wenz, at paragraph 29 of the PgPub, states "each probe includes a portion that is complementary to substantially complementary to the target (the 'target specific portion' T-SP) and a portion that is complementary to or has the same sequence as a primer (the 'primer specific portion', P-SP). At least one probe in each probe set further comprises an addressable support-specific portion (AS-SP) that is located between the T-SP and the P-SP".

Therefore, in view of this teaching by Wenz, it would have been obvious to one of ordinary skill to incorporate the same components of the probe where the AS-SP portion is incorporated at the 5' end of the primer and with the T-SP portion at the 3' (the opposite of what is depicted in Figure 1). Therefore, when the components of the probe/primer are modified in this way, the probe could function as a primer instead of as a ligation probe as depicted in Figure 1.

Next, it is noted that Applicant repeatedly makes note that the Wenz probe does not serve the same functional role as the primer/probe of the instant application because the addressable-specific portion of the Wenz probe cannot hybridize with a target and the probe cannot extend from the AS-SP portion. First, it is noted in response that the AS-SP portion of the Wenz probe is intended to correspond to the first base sequence of the claimed method and as noted in Applicant's response and more clearly in the amended claims "wherein the gene to be analyzed is prepared by the introduction of the first base sequence being nonspecific to the base sequence of the target gene". Therefore, the first base sequence of the invention is not specific to the target gene and would not hybridize to the target gene. As the AS-SP corresponds to the first base sequence, the fact that the AS-SP portion of the Wenz probe cannot hybridize with the target does not prevent the probe from meeting the limitation of the claims. To the contrary, that the AS-SP portion does not hybridize to the target indicates that the Wenz probe/primer meets the limitation of the claimed invention.

Second, regarding the assertion that the probe cannot extend from the AS-SP portion, it is unclear what this assertion is addressing? If this portion of the response is intended to suggest that the inclusion of the AS-SP portion is located at the 3' end of the probe, cannot bind and therefore cannot act as a primer, this issue was addressed above, wherein it was noted that Wenz explicitly teaches that the components of the primer/probe can be included in either probe, and does not specifically have to be provided in the exact format depicted in Figure 1. Therefore, if the AS-SP portion is moved to the 5' end of the primer/probe, the primer would be functionally equivalent to the primer/probe of the instant application.

Applicant traverses the remaining rejections for the same basic reasons as set forth above regarding the Wenz, Olyn, Livak and Eun rejection under 35 U.S.C. 103 and notes that the references do not teach a first base sequence as in the present claims. The reasoning and response in support of maintaining the rejections in view of Wenz reference have been addressed fully in the rejections stated above.